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MADRAS RECORD OFFICE.

Government of Madras.

Public works **DEPARTMENT.**

G.O. No. 3764 Press ~~Mis.~~

532-33

Dated 26. 11 1869.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department,
26th November 1869.

No. 532. Read the following Endorsement of the Officiating Superintending Engineer, 8th Division, dated Madura, 13th November 1869, No. 1,903 :—

Read the following :—

No. 62.

Memorandum on progress of work in connection with the Perryaur Project up to 31st October 1869.

THE six-foot path has been completed to within a quarter of a mile of the saddle to be used as an escape. It cannot be continued further until the level of the lake is finally determined on, as the trace of the road will depend to some extent upon this point.

2. Owing to the probability of the sum available for expenditure being less than was at first expected, operations have been, to some extent, restricted during the past month, and a small portion only of the road has been widened out to 18 feet. It is proposed, for the present, to drop this portion of the work altogether, and after completing the six-foot path to confine ourselves to the completion of the surveys, and of the examination of the soil in the neighbourhood of the dam site.

3. The former have been carried on vigorously during the month, and have only been slightly interrupted by the heavy rain during the last ten days. It is expected that the survey of the lake basin will be completed by the end of the present month; after which there will remain the additional investigations in the valley below the dam site, indicated by the Chief Engineer for Irrigation on the occasion of his late visit.

4. The depth of earth has been found so much greater than was anticipated, that a considerable increase in the depth, and consequently in the expense of the excavations, will be necessary ; and as the position of the rock underlying the surface soil will exercise considerable influence on the details of the design of the dam, these excavations must be carried a good deal further before the latter can be finally decided on. At present it is not possible to make very much progress with them, as the heavy rain renders it difficult to carry on excavation in deep pits, and it is therefore probable that we shall not be able to do any great amount of work in this direction until the close of the monsoon.

5. Lieutenant Coaker has gone down to Madura, to take up the surveys for the distribution works.

6. A table and diagrams of rain-fall and discharge of river are enclosed. It will be seen that the rain-fall is little less than Captain Ryves' estimate,* but the discharge of the river is very much less, being considerably less than half.

* Rain-fall 11·56 inches.
Depth run off 7·67 inches.
Discharge 165 millions cubic yards.

7. The very great disproportion between the rain-fall observed at the two camps, and the discharge of the river, especially during the last ten days, is worthy of notice. At this time of the year the rain registered at the camps cannot give at all a correct idea of the quantity which falls in the upper part of the Perryaur basin. The valley of the Chinna Moollyar, in which the upper camp is situated, is completely open to the north, and the lower camp, though not actually in this valley, is so near its mouth as to be exposed, in a great degree, to the same influences. The upper portion of the Perryaur valley, on the other hand, is closed in by high

hills on both the north and east, and a large portion of the rain coming from the former quarter would be intercepted by the Peria Moollyar, so that it seems doubtful whether any very large supply could ever be received by the Upper Perryaur during the north-east monsoon. The freshes that we have had during the latter part of October have been caused chiefly by heavy floods in the Peria Moollyar, the main river above the junction having been comparatively but little affected.

CAMP at PERRYAUR, (Signed) J. PENNYCUICK, Lieut., R.E.,
2nd November 1869. *Executive Engineer on Special Duty.*

FORWARDED to the Chief Engineer for Irrigation, with diagram.

(Signed) H. L. PRENDERGAST, Captain, R.E.,
Offg. Superintending Engineer, 8th Division.

No. 533. ORDER THEREON, 26th November 1869, No. 3,764.

IRRIGATION, No. 29.

RECORDED with reference to G. O., No. 3,763, of the 26th November 1869.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Superintending Engineer, 8th Division.

Beyond Supdt's Sub. to Dept. by Con. of Engr. to Chief Engr. for Irrign Office 26-11-70

3d

Memorandum.

Requested for reference the undermentioned papers

Enclosure to Supg Engr's (8th Div) letter No 1903 of 13 Nov: 69, with the letter in original, transferred to P.W. Dep: on the 16th Nov. 69

OFFICE OF THE CHIEF ENGR. FOR IRRIGATION, P. W. Department. 22 Nov: 1870.

D. W. Hawkins
Head Clerk.

To

The Registrar of the P.W. Secretariat

No 62.

Memorandum on progress of work in connection with the Periar Project up to 31st October 1869.

The ~~six~~ foot path has been completed, to within a quarter of a mile of the saddle to be used as an escape. It cannot be continued further, until the level of the lake is finally determined on, as the trace of the road will depend to some extent upon this point.

2 Owing to the probability of the sum available for expenditure being less than was at first expected, operations have been to some extent restricted during the past month and a small portion only of the road has been widened out to 18 feet. It is proposed for the present, to drop this portion of the work altogether, and after completing the six foot path, to confine ourselves to the completion of the surveys, and of the examination of the soil in the neighbourhood of the dam site.

3 The former have been carried on vigorously during the month, and have only been slightly interrupted by the heavy rain during the last 10 days. It is expected that the survey of the lake basin will be completed by the end of the present month; after which there will remain the additional investigations in the valley below the dam site, indicated by the Chief Engineer for Irrigation, on the occasion of his late visit.

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to carry on excavation in deep pits, and it is therefore probable that we shall not be able to do any great amount of work in this direction until the close of the monsoon.

5 Lieutenant Coaker has gone down to Madura, to take up the surveys for the distribution works.

6. A table and diagrams of rainfall and discharge of river are enclosed. It will be seen that the rainfall is little less than Captain Ryves' estimate*, but the discharge of the river is very much less, being considerably less than half.

Rainfall 1·56 in
Depth run off ·7·67
Discharge ·165 millions cubic yards.

7. The very great disproportion between the rainfall observed at the two camps, and the discharge of the river, especially during the last 10 days, is worthy of notice. At this time of the year, the rain registered at the camps, cannot give at all a correct idea of the quantity which falls in the upper part of the Periar basin. The valley of the Chinna Moolyar in which the upper camp is situated, is completely open

1 Diagram

to the north, and the lower camp, though not actually in this valley, is so near it's mouth as to be exposed in a great degree to the same influences - The upper portion of the Periar valley on the other hand, is closed in by high hills, on both the north and east, and a large portion of the rain coming from the former quarter would be intercepted by the Peria Moollyar, so that it seems doubtful whether any very large supply could ever be received by the upper Periar, during the north east monsoon - The freshes that we have had during the latter part of October, have been caused chiefly by heavy floods in the Peria Moollyar, the main river above the junction having been comparatively but little affected.

(Signed) J. Pennycuick Lieut. R.E.
Ex: Engineer On Special duty.

Camp Periar
2nd November 1869.

(True Copy)

No. 1903

Forwarded to the Chief Engineer for

Enclo 1
1 Diagram

P.W. 1869 Dept
No. 843.

From
The Offg Supdg Engr
&c &c

To No. 4804
The Ag Chief Engr.
for Irrigation
Madras

Dated 13th November
Received 15th do } 1869.
No. 1903. Enl. 1.
Rd. 17

Forwards Copy of Lieutt Pennycuick's Memorandum on progress of works in connection with the Periar Project up to 31st October 1869.

No. 3764 - 26 - Nov. /69.
Vide an order

No. 3764

Recorded with reference to G. O. No. of the — November 1869 —

Fort St. George
26th Nov. 1869

To the Supdg. Surgeon 8th Divn.

Despd. 29/11/69.

Acc 4804

Govt. of {1869} Madras.

PUBLIC WORKS.

The Superintending Engr.
8th Division

Dated

Recd. /

Encl. /

G. O. 26 Nov. 1869, No. 3764

Nos. 532-533

Periar Project. Endorsement of the Supdg Engr of the 8th Dn submitting a Memo. of the progress of work in connection with the Periar Project in the Madura Dt, up to 31st Oct/69. Recorded.